

ANNUAL REPORT (OCTOBER 2005 – SEPTEMBER 2006)
ARIZONA GAME AND FISH DEPARTMENT
IN-LIEU FEE MITIGATION PROGRAM AND AGREEMENT

Name of Corps-Permitted Project	Corps File #	General Location of Impact (Waterway/city)	Coordinates of Impact	Fee Amount	Acres of Impact to Corps Jurisdiction	Acres of Mitigation Required	Date Corps Authorized Fee Transfer to ILF Sponsor	Date Funds Received by Sponsor	Date Corps Approved the Obligation of Fees Towards Mitigation Project	Name of ILF Sponsor's Mitigation Project	Jurisdictional Habitat Impacted (riparian, wetland...)	Habitat Used as Mitigation (wetland, riparian, upland...)	Type of Mitigation (restor., enhance., creation, preserv.)	Status of Mitigation Effort (in progress, complete...)
The Aerie, residential community	2004-01841-DE	Sedona, Yavapai County	T17N, R5E, Sections 5,6,7	\$3,982	0.38	0.38	January 24, 2006	January 26, 2006	November 15, 2005	Chevelon Creek Wildlife Area Habitat Restoration	Great Basin Conifer	Emergent Wetland, Riparian	Enhance and Restore	In progress; monitoring, planning
Lake Pleasant 5000, residential community	2003-01525-SDM	Lake Pleasant, Maricopa County	T6N, R2W, Sections 4,5,6,7,8,9,17,18	\$88,368	10.12	10.12	February 13, 2005	February 14, 2006	November 15, 2005	Chevelon Creek Wildlife Area Habitat Restoration	Ephemeral Washes, Sonoran Desert Scrub	Emergent Wetland, Riparian	Enhance and Restore	In progress; monitoring; planning
Cipriani, Road crossings and utility lines	2004-00550-SDM	Phoenix, Maricopa County	T1N, R5W, Sections 12, 13,23,24,25	\$4,139	0.474	0.474	April 20, 3006	April 21, 2006	November 15, 2005	Chevelon Creek Wildlife Area Habitat Restoration	Ephemeral Washes, Sonoran Desert Scrub	Emergent Wetland, Riparian	Enhance and Restore	In progress; monitoring; planning
Lake Pleasant Towne Center, commercial development	2002-01273-SDM	Peoria, Maricopa County	T4N, R1E, Section 5	\$3,843	0.44	0.44	May 2, 2006	May 3, 2006	November 15, 2005	Chevelon Creek Wildlife Area Habitat Restoration	Ephemeral Washes, Sonoran Desert Scrub	Emergent Wetland, Riparian	Enhance and Restore	In progress; monitoring; planning
El Mirage Rd, widening, realigning	2001-01027-SDM	Peoria, Maricopa County	T4N, R1E, Sections 11,13,14,24,25,36	\$16,940	0.64 perm 2.6 temp	0.64 1.3	Not yet transferred	Not yet received	November 15, 2005	Chevelon Creek Wildlife Area Habitat Restoration	Ephemeral Washes, Sonoran Desert Scrub	Emergent Wetland, Riparian	Enhance and Restore	In progress; monitoring; planning
Sols Wash, Wickenburg Downtown Flooding Mitigation	2006-01043-SDM	Wickenburg, Maricopa County	T7N, R5W Sections 1,2	\$45,843	5.25	5.25	Not yet transferred	Not yet received	November 15, 2005	Chevelon Creek Wildlife Area Habitat Restoration	Ephemeral Washes, Mesquite, catclaw, salt cedar, desert broom	Emergent Wetland, Riparian	Enhance and Restore	In progress; monitoring; planning
North Valley Parkway Extension	2005-01117-SDM	Phoenix, Maricopa	T5N, R2E Section 11	\$33,531	3.84	3.84	Not yet transferred	Not yet received	November 15, 2005	Chevelon Creek Wildlife	Ephemeral Washes,	Emergent Wetland,	Enhance and Restore	In progress; monitoring;

		County								Area Habitat Restoration	Sonoran Desert Scrub	Riparian		planning
										Chevelon Creek Wildlife Area Habitat Restoration	Total Project Acres = 215	Total Acres Satisfied = 41.414	Total Acres Owed = 173.586	Funds Expended = \$3,015
Cañada del Oro Estates and Rivers Edge, wash channelization, residential subdivision	2003-00124-RJD	Oro Valley, Pima County	T12S, R13E, Section 12	\$17,400	2.07	2.07	April 19, 2006	April 21, 2006	November 10, 2005	Springwater Canyon Habitat Restoration	Xeroriparian Wash, Sonoran Desert Scrub	Wetland	Enhance and Restore	In progress; monitoring; planning
										Springwater Canyon Habitat Restoration	Total Project Acres = 2.07	Total Acres Satisfied = 2.07	Total Acres Owed = 0	Funds Expended = 0
Cañada del Oro Estates and Rivers Edge, wash channelization, residential subdivision	2003-00124-RJD	Oro Valley, Pima County	T12S, R13E, Section 12	\$82,926	14.48	14.48	April 19, 2006	April 21, 2006	January 5, 2006	Cieneguitas Wetland Habitat Restoration	Xeroriparian Wash, Sonoran Desert Scrub	Wetland	Enhance and Restore	In progress; monitoring; planning
City of Nogales, detention basins	2003-01225-RJD	Nogales, Santa Cruz County	T24S, R14E, Section 4	\$25,400	0.43	4.435	September 15, 2006	September 19, 2006	January 5, 2006	Cieneguitas Wetland Habitat Restoration	Xeroriparian Wash, Sonoran Desert Scrub	Wetland	Enhance and Restore	In progress; monitoring; planning
Calle Azulejo detention basin	2005-00383-RJD	Peck Canyon Interchange, Santa Cruz County	T12S, R13E, Section 28	\$6,872	0.40	1.20	April 27, 2006	April 28, 2006	January 5, 2006	Cieneguitas Wetland Habitat Restoration	Xeroriparian Wash	Wetland	Enhance and Restore	In progress; monitoring; planning
Meritage Homes Construction, Kartchner Vistas, residential subdivision	2005-00850-RJD	Benson, Cochise County	T17S, R19E, Section 13 and T17S, R20E, Section 18	\$8,161	0.475	1.425	June 13, 2006	June 14, 2006	January 5, 2006	Cieneguitas Wetland Habitat Restoration	Xeroriparian Wash	Wetland	Enhance and Restore	In progress; monitoring; planning
Eagle Crest Ranch, residential and commercial development	2000-00817-SDM	South Pinal County	T10S, R14W, Section 32	\$35,307	4.11	6.17	April 3, 2006	April 5, 2006	January 5, 2006	Cieneguitas Wetland Habitat Restoration	Xeroriparian Wash	Wetland	Enhance and Restore	In progress; monitoring; planning
Garden Canyon Wash, SR 92 road widening, culvert	2005-01781-RJD	Sierra Vista, Cochise County	T22S, R20E, Section 24	\$973	0.17	0.17	March 30, 2006	March 31, 2006	January 5, 2006	Cieneguitas Wetland Habitat	Xeroriparian Wash	Wetland	Enhance and Restore	In progress; monitoring; planning

			and T22S, R21E, Section 19							Restoration				
										Cieneguitas Wetland Habitat Restoration	Total Project Acres = 40	Total Acres Satisfied = 26.455	Total Acres Owed = 13.545	Funds Expended = 0
Summary of All Income, Disbursements, and Interest Earned														
Income Oct 05 – Sept 06	Disbursements Oct 05 – Sept 06	All Interest Accrued To Date	Additional Funds in Account remaining from previous Fiscal Years Projects (minus all disbursements)		Total Amount in Account									
\$269,212	\$145,416* \$ 3,015** \$148,431	\$32,011	\$289,705		\$588,002									
	* Funds expended from Arlington Wildlife Area Wetland Project. See Status Report Below. **Funds expended from Chevelon Creek Wildlife Area Restoration Project. See Status Report Below.													

Status of Mitigation Effort

Chevelon Wildlife Area Wetlands - Time Line and Status:

Fall and Winter 2005 –

Develop engineering, restoration, and monitoring plans and internal environmental assessment checklist processes.

- Multiple meetings have been held with AGFD Regional wildlife and habitat program personnel, and engineers from Northern Arizona University. A conceptual restoration plan has been finalized.
- Currently waiting on additional funds to proceed with the contracting of engineer/construction manager.
- Internal environmental documentation will be finalized in December 2006.
- Livestock exclosure fence (i.e., wetland boundary fence) vendor has been identified and material is pending delivery.

Spring and Summer 2006 –

Monitor bio-indicators and abiotic conditions to establish pre-project baseline status for the project area.

- Southwestern willow flycatcher surveys have been completed
- Passerine bird surveys have been completed
- Baseline salt cedar vegetation has been mapped on digital orthophotos

Late Summer 2006 –

Begin removal of exotic vegetation in wetland and other portions of project area, dependent upon funding.

- Two-acre patch of salt cedar has been identified and marked for removal. Upon completion of the internal environmental assessment (Dec. 2006) we plan to stock this area with local strains of cottonwoods and willows that will be used as future cuttings (propagation material) for plantings within the project area.

Funds Expended –

\$3,015

Time and Travel for Monitoring and Planning

Springwater Wetland - Time Line and Status:

Fall and Winter 2005 –

Develop restoration, and monitoring plans, acquire external NEPA documentation to be completed by BLM, and internal environmental assessment checklist processes.

- Draft EA has been completed and reviewed (soil cores, archeological review, and consultation with livestock lessee completed). NEPA documentation should be finalized by December 2006
- Internal Department EA checklist waiting on completion of Federal NEPA documents
- Restoration and monitoring plans have been completed

Spring and Summer 2006 –

Monitor vegetation conditions to establish pre-project baseline status for the project area; establish photo points.

- Completed pre-project (baseline) vegetation, bird, and initial photos taken at fixed points

Late Summer 2006 –

Construct the pole fence enclosure; eradicate bullfrogs within the enclosure.

- Currently waiting on final NEPA documentation in order to proceed
- Fence construction currently waiting on final NEPA documentation to proceed

Fall or Winter 2006 –

Construct wetland depressions and eradicate invasive woody plants.

- Waiting on final NEPA documentation to proceed

Funds Expended –

\$0

Cieneguita Wetland - Time Line and Status:

Fall and Winter 2005 –

Develop restoration, and monitoring plans, acquire external NEPA documentation to be completed by BLM, and internal environmental assessment checklist processes.

- Draft EA has been completed and reviewed (soil cores, archeological review, and consultation with livestock lessee completed). NEPA documentation should be finalized by December 2006
- Internal Department EA checklist waiting on completion of Federal NEPA documents
- Restoration and monitoring plans have been completed

Spring and Summer 2006 –

Monitor vegetation conditions to establish pre-project baseline status for the project area; establish photo points.

- Completed pre-project (baseline) vegetation, bird, and initial photos taken at fixed points

Late Summer 2006 –

Construct the pole fence enclosure; eradicate bullfrogs within the enclosure.

- Currently waiting on final NEPA documentation in order to proceed
- Fence construction currently waiting on final NEPA documentation to proceed

Fall or Winter 2006 –

Construct wetland depressions and eradicate invasive woody plants.

- Waiting on final NEPA documentation to proceed

Funds Expended –

\$0

Arlington Wildlife Area - Time Line and Status:

This project is in its final stages. This project was proposed and accepted as an In-Lieu Fee Mitigation site before the first MOA agreement was in place in July 05 (MOA amended in June 06). See the Annual Report submitted for Oct 04 – Sept 05 for additional information.

Summary: This project was proposed in efforts to reverse damages incurred in the 1993 and 2003 flooding of the wildlife area, refurbish the dikes and access points, and enhance the operational infrastructure of the water delivery and management system for the ponds. This element will return open water habitat to the ponds consistent with the wildlife area's emphasis on waterfowl management. The improvements to infrastructure will return basic functional characteristics to the dikes and water control structures to allow more consistent management of water levels in the ponds. This will enhance habitat values for wildlife species targeted for management including waterfowl, and especially Yuma clapper rail. The improvements will allow some additional protection from flood events and help regulate runoff water entering from neighboring lands as well.

Restore and Upgrade Pond levees and water control structures:

We re-established the grades and renovated the existing levees, and are currently in the process of establishing new water control structures, and enhancing two portions of the levee to create armored spillways at the place where water is likely to enter the pond from local drainage ways, and to provide a point of overflow from the ponds. Particulars are as follows:

1. COMPLETE: Improve the perimeter levees of the two existing wetland units with a designed footprint for the reconstructed levees of approximately 4.37 acres. The improved levees will largely reconstruct the existing levees. Total earthmoving for the levee re-construction will be about 40,500 cubic yards (CY). This amount

includes 11,000 CY of topsoil and organic material to be stripped from the borrow location (~ 10.0 acres immediately east of the existing ponds). This material will be subsequently re-placed on the project perimeter and disturbance areas following project completion. Approximately 29,500 CY of non-organic soil will be excavated from below the topsoil zone and used in levee re-construction.

2. COMPLETE: Install flashboard type water control structures between the upper and lower wetland units and at the outlet of the lower unit to provide water and vegetation management capabilities to both units.
3. COMPLETE: Install a water control structure to regulate delivery of tailwater from neighboring agricultural fields either into or away from the ponds.
4. COMPLETE: Install emergency spillways to prevent damage to the lower wetland unit from most future flood events from Centennial Wash. Spillways will be incorporated into the design of the unit's levees and use both rock and vegetation for stabilization. One emergency spillway will be constructed on the west levee of the unit and one will be constructed on the south levee of the unit.

Rehabilitate upper pond:

COMPLETE: The ponds suffered serious silting in during the 1993 flood. Shallow water levels led to high operational costs to maintain water levels and increased dominance of the upper pond by emergent vegetation, primarily cattail (*Typha* sp.). In recent years cattail has completely covered the surface area of this pond (ca. 4.85 surface acres) and has caused it to become highly eutrophic. This project scope of work included drying the pond to allow construction activities to occur within the footprint and then burn off the existing highly decadent cattail vegetation that currently dominates the upper pond. However, wind constraints did not allow the burn to take place, therefore vegetation was removed via mechanical means.

COMPLETE: Subsequent to the drying out and burning of the upper pond, potholes totaling about 0.80 acres (~ 16% of pond) will be excavated to provide open water habitat for waterfowl. Excavated material will be piled into stem levees extending into the pond at the same or similar height as the main levees. The resulting stem levee will form a platform for observation areas and hunting blinds, will increase edge-effect and add diversity to the pond habitat, and will offer points of access to the intimacies of the pond. Target sizes for potholes are irregular shapes with longest chord perhaps 100 feet in length and excavated to a maximum depth of about 6 feet below existing pond-bottom grade. Sides would contour up from maximum depth to existing pond-bottom grade at about a 3:1 slope.

Enhance Water Delivery Infrastructure:

IN PROCESS: Water delivery to the existing ponds and new basin will be redeveloped. The existing well, powered by a 100 HP electric motor may simply be refurbished and the discharge piping extended or ports from the upper pond constructed to serve the new basins. Alternatively, it may be determined to be more cost effective to replace the electric

motor with a diesel engine. If so, the following description of well retrofit to diesel would apply.

IN PROCESS: Well retrofit to diesel power. All work would occur at the location of the existing well and an area immediately surrounding, some 1200 square feet. A diesel engine and matched bowl and casing system has been obtained from surplus equipment from the White Water Draw Wildlife Area. A fuel tank will be added and both will be situated inside a concrete containment structure suitable to capture spills of fuel and lubricants to a volume of twice the fuel tank capacity (or as specified by engineering/compliance standards). This containment structure would be approximately 20' by 30' in size and would require excavation to a depth of about 2 ft. to install. This entire pump complex would be situated within a newly constructed fence. The fenced area would be approximate 30 feet long by 40 feet wide for a total area of 1200 square ft.

An auto-start feature of the engine/pump setup will require the construction of a water-level sensing station for a water level detection device and the necessary connectors to the pump motor. This is a minor element that has not yet been specified in detail, but which has a footprint of only a few square feet inside the existing project construction footprint.

These final stages are expected to be completed by December 2006.

Early Project Results: Increases in waterfowl and shorebird usage of the ponds have been noted. Increased numbers of Yuma clapper rail have been observed, as have stilts, and other marsh and shorebirds. Mallards and cinnamon teals reproduced young in the project area.

Funds Expended –

\$142,416

Contract work, construction, development of area